



Agriculture News Yellowstone County Extension

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TO: Farm & Ranch Businesses
FROM: Paul V. Dixon
Yellowstone County Agriculture Agent

Conditions Favor Stripe Rust on Winter and Spring Wheats

Stripe rust has been positively confirmed in Gallatin County on a susceptible variety, Nuwest. Conditions in Yellowstone County have also been extremely favorable for stripe rust development, and if it remains cool and wet, we may see this disease blow up very quickly. If you have planted a variety known to be susceptible to stripe rust, please scout it NOW. Symptoms include yellow pustules that occur in stripes (symptoms will vary with variety). Symptoms will be in the bottom of the canopy, where there is more moisture. Symptoms can be confused with leaf rust, which is very prevalent in the Great Plains this summer, but no reports have been received from MT as of yet. Leaf rust can be differentiated from stripe rust by the color of the pustules (more "rust" colored) and the pattern of the lesions (less 'striped'). Some good pictures are available on the web at <http://www.oznet.k-state.edu/path-ext/factSheets/Wheat/Wheat Stripe Rust.asp> or contact the Extension Office for color copies of the pictures.

Resistant winter wheat varieties include Yellowstone, Promontory, Rocky, Rampart, Jagalene and Ledger. Moderately susceptible varieties are Rampart, Genou, Vanguard, Wahoo, Hatcher, Genou, Above, Big Sky, Nuwest, Pryor, Morgan, Rocky and Falcon, among others. Moderately susceptible varieties may experience yield losses under severe disease and include Pryor, CDC Falcon, CDC Buteo and Morgan. Highly susceptible varieties including Neeley, NuSky, NuWest, Big Sky and Morgan will need to be sprayed to avoid yield losses. There is less yield benefit to spraying a resistant variety.

Stripe rust can also affect spring wheat. Resistant varieties include Conan and Scholar and moderately resistant varieties include Hank, Freyr, Reeder and Explorer. Highly susceptible varieties include McNeal, NorPro and Fortuna. Varieties rated as moderately susceptible include Outlook, Choteau, Ernest, Kelby and Knudson. A resistant to moderately resistant variety can develop lesions but they are often restricted in their ability to develop and generally do not have to be sprayed.

If symptoms are seen, the variety is classified as 'susceptible' and the yield potential is high enough to justify a fungicide application, spray a fungicide at the FIRST appearance of symptoms. Most registered products have a 45 day waiting period between application and harvest, so watch your pre-harvest interval according to your crop maturity. Appropriate fungicides include products in either the strobilurin or triazole classes, or combinations of the two chemistries (See Product List on the other side of this newsletter). Fungicide application is appropriate through flowering, but once the crop is in the grain-filling stage, benefits from fungicides are unlikely.

For more information on Stripe rust, visit the High Plains IPM at <http://highplainsipm.org>

Product list for Stripe, Leaf and Stem Rust, and other Leafspot Diseases:

Product²	Target diseases	Product rate/acre	Application timing
Quilt (Syngenta)	Leaf rust Stem rust Stripe rust Septoria glume blotch Tan Spot Septoria leaf blotch Spot blotch Powdery mildew Helminthosporium - leaf blight	7-14 fl oz	Up to Feekes 9 (ligule of flag leaf just visible) plant stage
Headline (BASF)	Leaf rust Stem rust Stripe rust Septoria glume blotch Tan Spot Septoria leaf spot Spot blotch Powdery mildew	6-9 fl oz	Up to Feekes 10.5 (late heading emergence) plant stage
Quadris (Syngenta)	Leaf rust Stem rust Stripe rust Septoria leaf blotch Tan spot Septoria glume blotch Powdery mildew	6.2-10.8 fl oz	Feekes 6 (immediately after jointing) to 10.5 (late head emergence)
Stratego (Bayer)	Leaf rust Stem rust Stripe rust Septoria leaf blotch Tan spot Powdery mildew	10 oz	Feekes 8 (emerging flag leaf)
Tilt (Syngenta)	Leaf rust Stem rust Stripe rust Septoria leaf spot Tan spot Septoria glume blotch	4.0 fl oz	Feekes 8 (emerging flag leaf)
PropiMax EC (Dow AgroSciences)	Leaf rust Stem rust Stripe rust Septoria leaf spot Tan spot Septoria glume blotch	4.0 fl oz	Feekes 8 (emerging flag leaf)
Manzate 75DF (Griffin L.L.C.)	Septoria glume blotch Leaf rust Septoria leaf spot Tan spot	2.0 lb	Feekes 10 (boot) and again at 10.5 (late head emergence)
Dithane DF F-45 M-45 (Dow AgroSciences)	Septoria glume blotch Leaf rust Septoria leaf spot Tan spot	2.1 lb 1.6 qts 2.0 lb	Feekes 10 (boot) and again at 10.5 (late head emergence)
Penncozeb 80WP 75DF (Elf Atochem)	Septoria glume blotch Leaf rust Septoria leaf spot Tan spot	1.0-2.0 lb	Feekes 10 (boot) and again at 10.5 (late head emergence)

**For Fact Sheets and General Ag Information
Specific to Yellowstone County,
Please refer to our web page at:**

<http://www.co.yellowstone.mt.gov/extension/ag/>

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